

#### CLAIMS LISTING 10/11/2004

hat is claimed is:

1. (currently amended) A labelling reagent having the structure

$$\begin{array}{c} \text{M-NH-CO-L-Z-(CH}_2) \text{ n-O-X} \\ \\ | \\ (\text{CH}_2) \text{ m-O-K} \end{array}$$

in which

- [[-]]M is a detectable label,
- [[- ]]L represents a linker having the structure -(CH<sub>2</sub>)p- or the structure -(CH<sub>2</sub>)p-CO-NH-\_
- [[-]]Z is either CH or N,
- [[-]]X is a cleavable protective group,
- [[- ]]n, m and p are, independently of one another, natural numbers
   from 1-15, and
- 2. (currently amended) A labelled reactive support having the structure

$$\begin{array}{c} \text{M-NH-CO-L-Z-(CH}_2) \text{ n-O-X} \\ \\ \\ \text{(CH}_2) \text{ m-O-V-T} \end{array}$$

in which

- [[-]]M is a detectable label,
- [[- ]]L represents a linker having the structure -(CH<sub>2</sub>)p- or the structure -(CH<sub>2</sub>)p-CO-NH-\_\_\_
- [[-]]Z is either CH or N,
- [[-]]X is a cleavable protective group,
- [[-]]n, m and p are, independently of one another, natural numbers
   from 1-15,

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- [[-]]T is a solid phase support material, and
- [[-]]V is a linking group which contains a cleavable bond.
- (canceled)
- 4. (original) A support as claimed in claim 2, wherein the support material consists of glass particles having a defined pore size.
- (currently amended) A support as claimed in claim 2, wherein the detectable label M is a fluorescent dye, preferably fluorescein.
- (canceled)
- 7. (currently amended) A process for the production of a <u>labelled reactive</u> support as claimed in claims 2-5, comprising the following steps:
  - a) preparing providing a trifunctional spacer containing two reactive
    hydroxyl groups and one reactive amino group.
  - b) introducing a protective group on—a one of the hydroxyl groups,
  - providing a molecule having the structure M-NH-CO-(CH<sub>2</sub>)p-COOH in which
    prepresents a natural number between 1 and 15 and M is a detectable
    label and converting the carboxylic acid group of a the molecule as
    claimed in claim 6 into an activated ester,
  - d) coupling the activated ester to the reactive amino group of the trifunctional spacer, and
  - e) coupling the hydroxyl group of the trifunctional spacer which is still free to the support material, thereby forming the labelled reactive support.
- 8. (canceled)

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- 9. (currently amended) A process for the production of a <u>labelled reactive</u> support as claimed in claims 2-5, comprising the following steps:
  - f) preparing providing a trifunctional spacer using the method of claim 8
    having the structure

### in which

Z is either CH or N,

L is a linker having the structure - (CH<sub>2</sub>)p- or the structure - (CH<sub>2</sub>)p-CO-NH-, and

 $\underline{m}$ ,  $\underline{n}$  and  $\underline{p}$  are, independently of one another, a natural number between 1 and 15,

- g) introducing the a protective group on a one of the hydroxyl groups,
- converting the carboxylic acid group of the trifunctional spacer into an activated ester,
- i) coupling a detectable molecule containing a free amino group by reacting the active ester with the amino group, and
- j) coupling the <u>second of the hydroxyl groups</u> that is still free to the support material, thereby forming the labelled reactive support.
- 10. (canceled)
- 11. (canceled)
- 12. (canceled)
- 13. (canceled)
- 14. (currently amended) A-The labelling reagent as claimed in elaim 13 claim

  1, wherein the detectable label M is a fluorescent dye, preferably fluorescein.
- 15. (canceled)

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- 16. (canceled)
- 17. (canceled)